

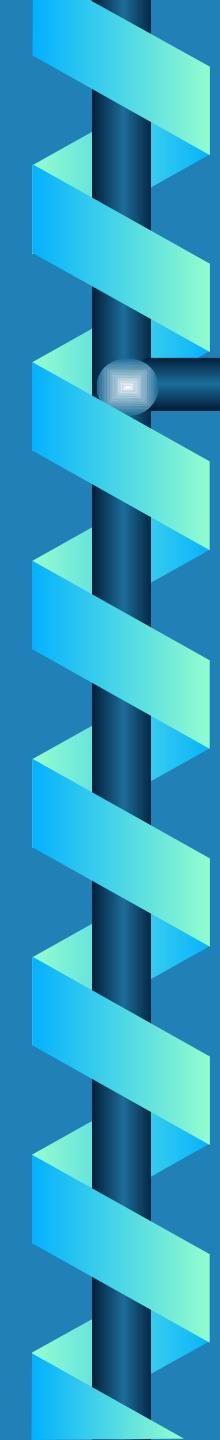


Combat Life Saver

Lesson 23

IDENTIFY AND TREAT COLD INJURIES

Compiled and edited by,
2LT John C. Miller, PA-C

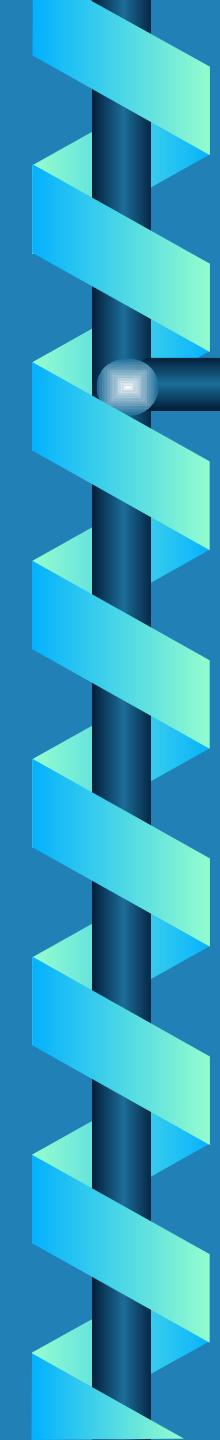


Lesson 23

IDENTIFY AND TREAT COLD INJURIES

INTRODUCTION

Cold injuries have always been a threat to military forces operating in cold climates. In addition to frostbite (which occurs in freezing weather), there are several cold injuries such as trench foot, chilblain, and hypothermia which can occur even when the temperature is above freezing.



IDENTIFY AND TREAT COLD INJURIES

⦿ **TASK**

Identify the proper procedures for treating a cold injury casualty.

□ **CONDITION**

Given written items pertaining to the identification and treatment of cold injuries.

□ **STANDARD**

Score 70 or more points on the 100-point written examination.



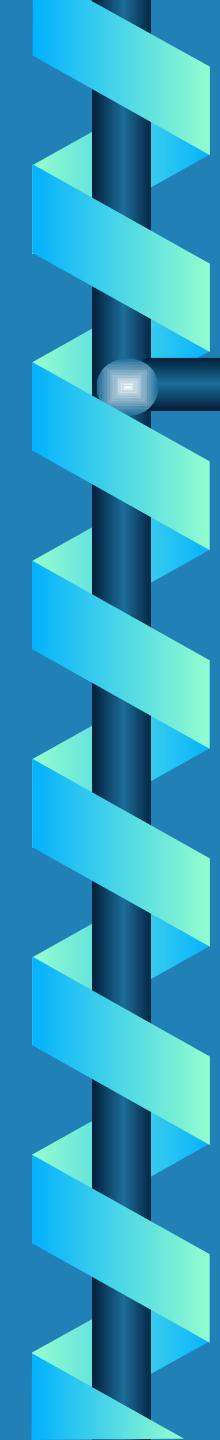
IDENTIFY SIGNS AND SYMPTOMS OF CHILBLAIN

- Skin exposed to cool temperatures (50 degrees F or lower).
- Acutely red, swollen, hot, tender, and/or itching skin.
- Open sores or bleeding lesions from continued exposure.



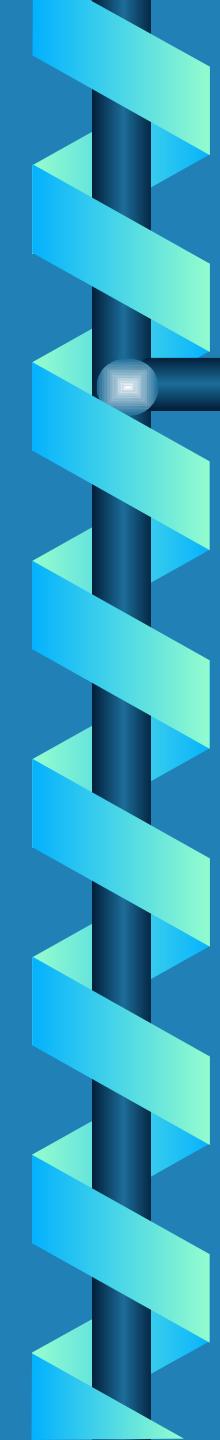
TREAT A CASUALTY WITH CHILBLAIN

- Apply local warming (put bare hands over the affected area on the face, put affected hands inside the uniform under the armpits, etc.).
- Do not rub or massage the affected area.
- Apply a field dressing to lesions (sores).
- Have the casualty examined by medical personnel when the opportunity presents itself.



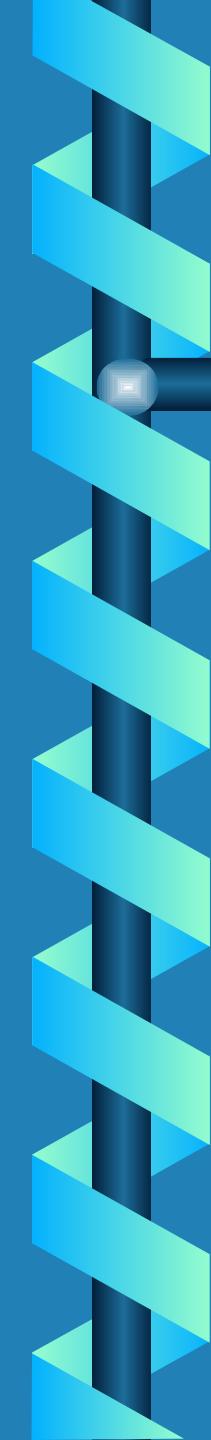
IDENTIFY SIGNS AND SYMPTOMS OF IMMERSION SYNDROME

- Hand or foot in water for an extended time.
- Affected hand or foot may have blisters, swelling, redness, and bleeding.
- First phase: Hand or foot is cold and without pain.
- Second phase: Affected limb feels burning hot and has shooting pains.
- Third phase: Pale skin, bluish coloring around the nailbeds and lips, weak pulse.



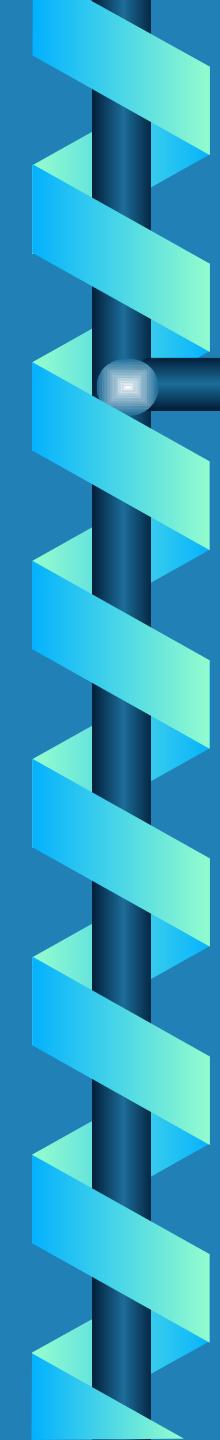
TREAT A CASUALTY WITH IMMERSION SYNDROME

- ➊ Dry the affected part immediately.
- ➋ Remove wet clothing and replace with dry, warm clothing.
- ➋ Rewarm the affected area gradually in warm air.
 - Do not rub or massage the affected hand or foot.
- ➋ Elevate the affected part to reduce swelling.
- ➋ Protect the casualty from additional injury.
- ➋ Evacuate casualty to a medical treatment facility as soon as practical.



IDENTIFY SIGNS AND SYMPTOMS OF FROSTBITE

- ➊ Flesh has been exposed to freezing temperatures (below 32 degrees F).
 - ➋ Usually occurs on the feet, toes, nose, ears, chin, cheeks, forehead, fingers, hands, and wrists.
 - ➋ Superficial Frostbite
 - ➋ A reddish (in light-skinned individuals) or grayish (in dark-skinned individuals) area on exposed skin.
 - ➋ A sudden blanching (whitening) of the affected area.
 - ➋ A tingling sensation, followed by numbness.



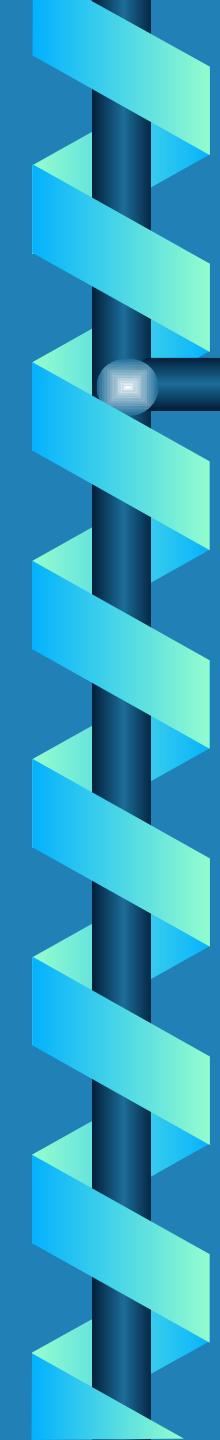
IDENTIFY SIGNS AND SYMPTOMS OF FROSTBITE

- Deep Frostbite
- Total lack of feeling in the affected (frozen) tissue.
- Pale, yellowish, waxy-looking skin.
- Solid flesh (feels wooden to the touch).
- Red-violet discoloration, blisters, and sloughing of affected skin may occur (usually 1 to 5 days after the initial injury).



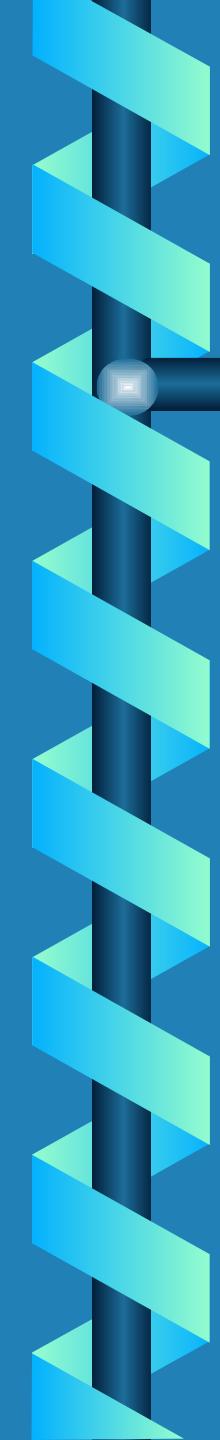
TREAT A CASUALTY WITH FROSTBITE

- Move the casualty to a sheltered area.
- Loosen constricting clothing.
- Remove jewelry on the affected limb, if applicable. (A ring on a swollen finger could interfere with blood circulation.).



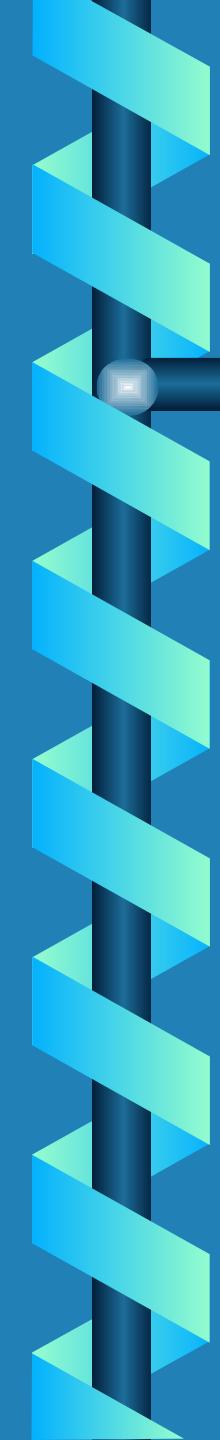
TREAT A CASUALTY WITH FROSTBITE

- ➊ Gradually warm the casualty.
 - Use the same warming procedures as with chilblain.
 - If the feet are frostbitten, remove the casualty's boots and socks and put his feet against the exposed abdomen of another soldier. Cover both soldiers to keep them warm.
 - Do not expose the frostbitten area to extreme heat which could result in burns.
 - Do not rub, massage, or soak the frostbitten area.
- ➋ Give the casualty something warm to drink.
 - Do not give alcoholic beverages or tobacco products to the casualty. Alcohol and tobacco can promote heat loss.



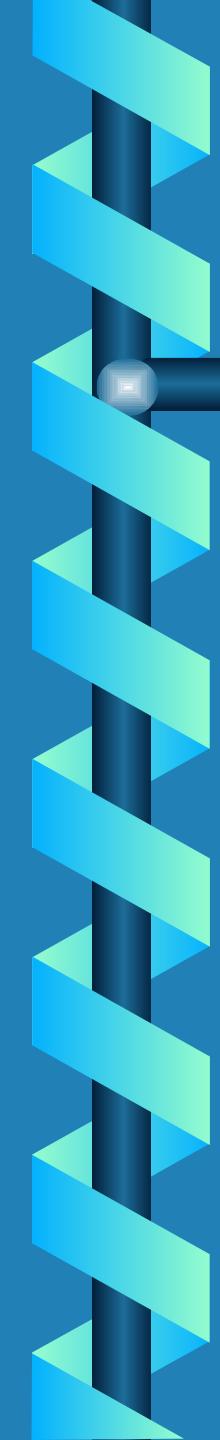
TREAT A CASUALTY WITH FROSTBITE

- Protect the frostbitten area from cold and additional injury.
- Evacuate the casualty to a medical treatment facility as soon as possible. If the casualty's frozen feet must be exposed to freezing temperature during evacuation, do not thaw his feet prior to evacuation.
- Question:
 - Suppose a soldier has a foot with deep frostbite and will have to walk to a nearby medical treatment facility. Should you warm his foot before sending him to the facility?
- Response:
 - No.



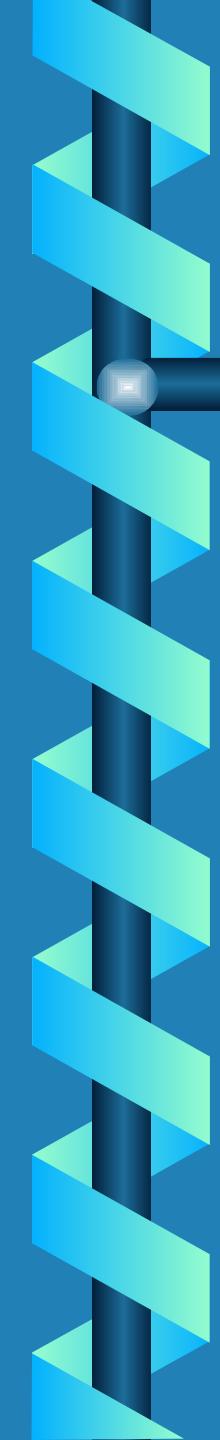
IDENTIFY SIGNS AND SYMPTOMS OF GENERALIZED HYPOTHERMIA

Generalized hypothermia occurs when the whole body (rather than just a body part) is cooled to an unusually low temperature. It is a medical emergency which can result in death if not treated promptly. Generalized hypothermia is often called simply "hypothermia."



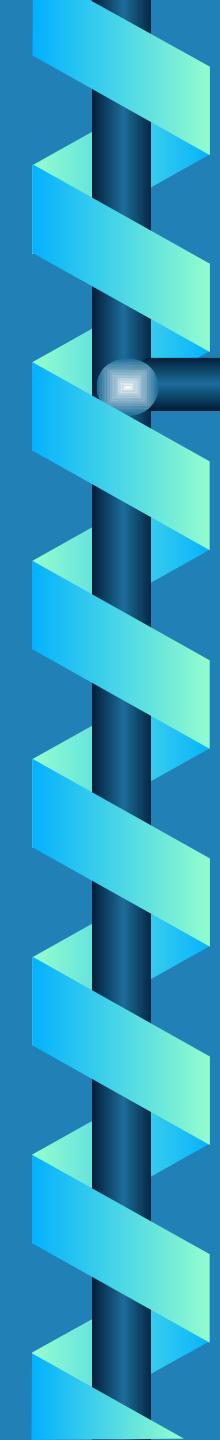
IDENTIFY SIGNS AND SYMPTOMS OF GENERALIZED HYPOTHERMIA

- Moderate Hypothermia
- Apathetic, lethargic behavior.
- Pale, cold skin.
- Acetone (sweet, fruity) breath odor.
- Shivering, which soon stops.



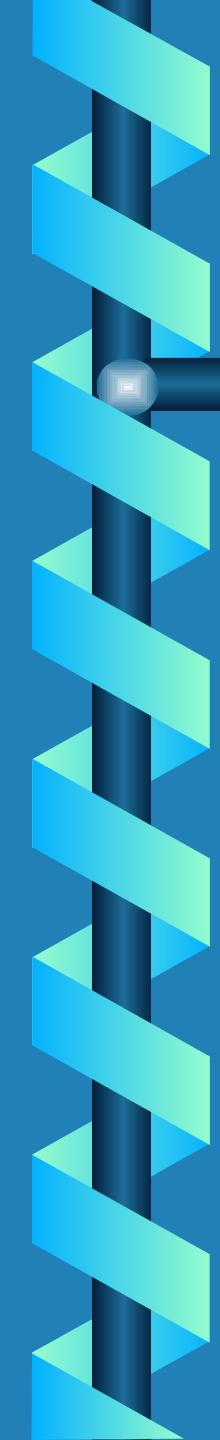
IDENTIFY SIGNS AND SYMPTOMS OF GENERALIZED HYPOTHERMIA

- Severe Hypothermia
- Skin ice cold.
- Slow, shallow respirations.
- Faint, irregular pulse or lack of detectable pulse.
- Glassy eyes.
- Mental confusion.
- Unconsciousness.



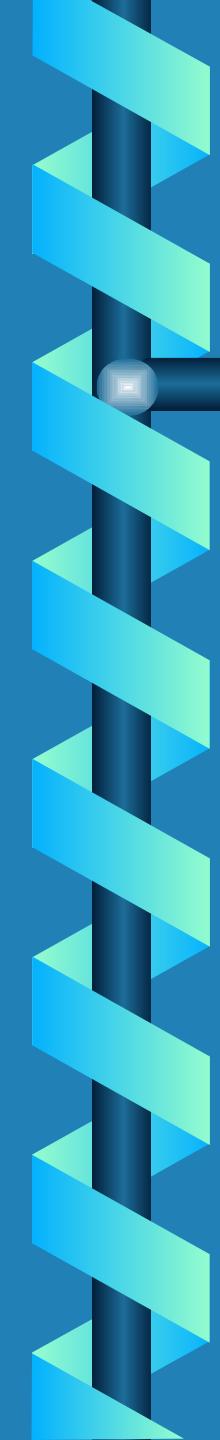
TREAT A CASUALTY WITH GENERALIZED HYPOTHERMIA

- Moderate Hypothermia
- Move the casualty out of the wind to a sheltered environment.
- Replace wet clothing with dry clothing or sleeping bags.
- Cover the casualty with blankets or other insulating material.



TREAT A CASUALTY WITH GENERALIZED HYPOTHERMIA

- Give the casualty warm, nutritious fluids to drink.
 - Do not give alcoholic beverages or tobacco products to the casualty.
- Wrap the casualty from head to toe and evacuate to a medical treatment facility in a recumbent (lying down) position.



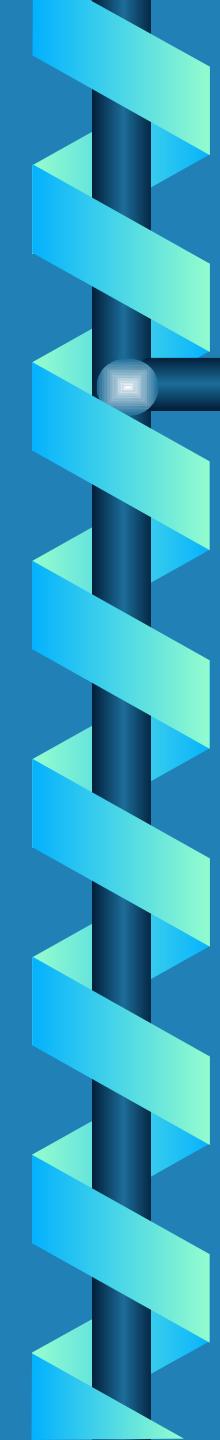
TREAT A CASUALTY WITH GENERALIZED HYPOTHERMIA

- Severe Hypothermia
- Cut away wet clothing and replace with dry clothing.
- Ensure that the casualty's airway remains open and the casualty continues to breathe.
 - Perform mouth-to-mouth resuscitation if the casualty's breathing rate drops below five respirations per minute.
 - Use J-tube if needed and the casualty is unconscious.



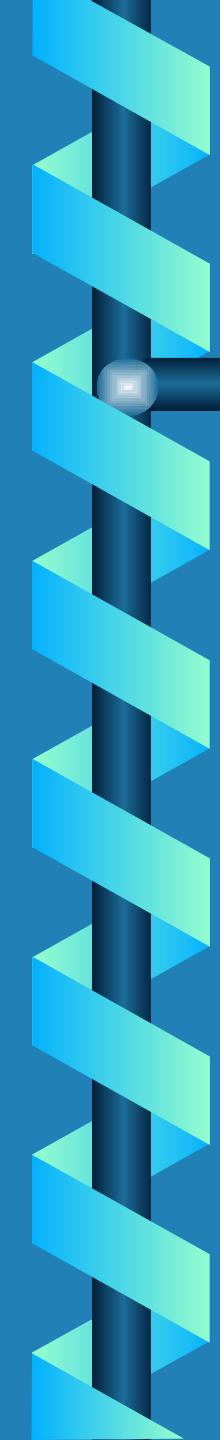
TREAT A CASUALTY WITH GENERALIZED HYPOTHERMIA

- Apply an additional heat source since the casualty's body cannot generate sufficient body heat to warm itself.
 - Have another soldier remove his outer clothing and get into the same sleeping bag as the casualty, then covering both soldiers. The second soldier's body heat will warm the casualty's body.
- Evacuate the casualty to a medical treatment facility as soon as possible.
 - **Evacuate the casualty even if you cannot detect respiration or a heartbeat.**
 - Be gentle when moving the casualty.



IDENTIFY SIGNS AND SYMPTOMS OF SNOW BLINDNESS

- I Snow blindness is a temporary loss of sight caused by ultraviolet rays from the sun reflecting off snow or ice. Snow blindness can usually be prevented by wearing regular or improvised sunglasses which cut down on the amount of ultraviolet rays which reach the eyes.



IDENTIFY SIGNS AND SYMPTOMS OF SNOW BLINDNESS

□ Question:

- Suppose a soldier working in an ice-covered terrain says that he will not wear his sunglasses because it is cloudy? Should the soldier still wear his sunglasses?

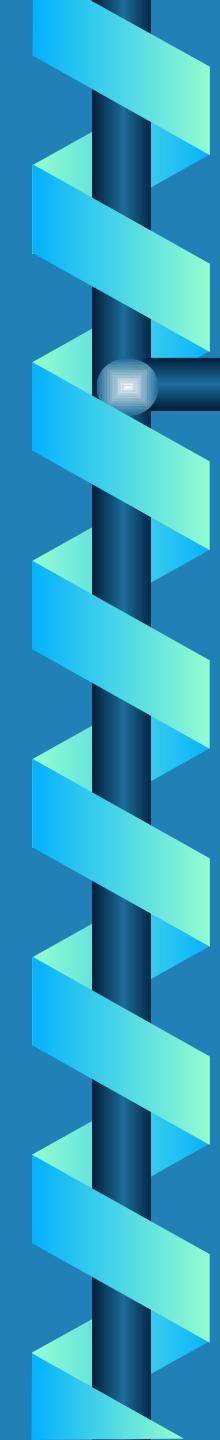
□ Response:

- Yes. Snow blindness often occurs in cloudy or hazy weather. Clouds and haze do not stop the invisible ultraviolet radiation.



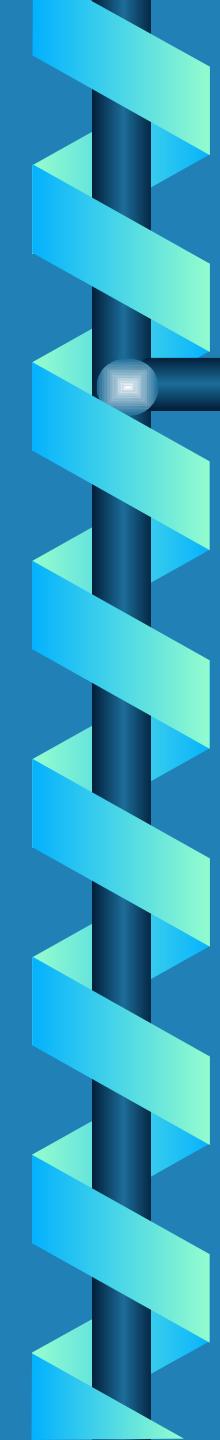
IDENTIFY SIGNS AND SYMPTOMS OF SNOW BLINDNESS

- Scratchy feeling in the eyes as though dirt or sand were present in the eyes, sometimes more severe pain.
- Decreased vision.
- Tears.
- Difficulty in opening eyelids.
- Headache.
- Pain.



TREAT A CASUALTY WITH SNOW BLINDNESS

- Cover the casualty's eyes with a dark cloth.
- Reassure the casualty that the condition is temporary and he will regain his sight.
- Evacuate him to a medical treatment facility as soon as practical.



COLD INJURIES

- Question:
 - Of the cold injuries discussed, which is a medical emergency requiring immediate treatment?
- Response:
 - Hypothermia.



IDENTIFY AND TREAT COLD INJURIES

CLOSING

Cold can be a deadly enemy. Soldiers can protect themselves from this enemy by taking preventive measures. The buddy-system should be used since it may be easier to detect the early signs and symptoms of cold injury on another person than on yourself. If a soldier does become a cold injury casualty, you must be ready to recognize the problem and provide proper treatment. This lesson is tested in the written multiple-choice examination.

Questions

